

REACTION PROBE CHIP AND DETECTION SYSTEM

ABSTRACT OF THE DISCLOSURE

A reaction probe chip comprising a substrate having a plurality of discrete, regularly arranged through-holes; and a carrier filled into and held in the through-holes, the carrier having probe molecules fixed thereto such that the probe molecules are different according to the through-holes. The carrier having the probe molecules fixed thereto is preferably a porous membrane, a nonwoven fabric, or porous glass entangled with or bound to the porous membrane or nonwoven fabric. A reaction product detection system flows a sample, including fluorescence labeled DNA to be detected, simultaneously and slowly through a plurality of discrete through-holes regularly arranged in a substrate, thereby binding an analyte to probe molecules, and detects the analyte by a fluorescence detector. The reaction probe chip and the detection system based on a convenient method for preparing DNA Chip can be used in various diagnoses of physiological functions, including DNA polymorphism.

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